

BBTB Date:	16 December 2021
BBTB Number:	BBTB-077
BBTB Title:	Setting 20KHz Surveillance Levels
System Description:	VIGIL2 / VIGIL3 PAVA Systems
Product(s) Affected:	BVRDACO / BVRDNCO & BELI
Reference:	--
Priority:	3

1 - Essential: Action is Recommended

2 - Important: Product Form / Fit / Function has been changed (may affect compatibility)

3 - General: For information / reference

4 - Obsolescence: Notification of Component or Product Obsolescence

DESCRIPTION OF THE PROBLEM

Baldwin Boxall has identified an issue with unsuitable DVM multimeters being used during commissioning which cannot accurately indicate 20KHz RMS signal levels.

The 20KHz surveillance level on VIGIL2 & VIGIL3 systems should be set to approx 10V RMS during commissioning.

Although some meters state “True RMS” they are only capable of correctly indicating AC RMC levels at less than 1KHz, these meters cannot accurately detect a 20KHz AC RMS level and will show a substantially lower reading.

SYMPTOMS OF THE PROBLEM

Increased surveillance output may adversely affect the system in many ways:

- Potential system instability if excessive levels are employed,
- Increased heat generation and potentially reduced system reliability,
- Increased quiescent current may prevent adequate battery backup provision.



CAUTION

Excessive surveillance output may cause EN54-16 certified systems to have insufficient battery capacity to meet the requirement for 24hours quiescent & 30mins full power operation.

SUGGESTED ACTION

The specification of meters used for setting 20KHz surveillance settings should be checked to ensure they can accurately indicate AC RMS signals at 20KHz.

Baldwin Boxall have identified that the Fluke 287 DVM is suitable and accurate for measuring 20KHz AC RMS signals.

Customer Services Contact Details

For further assistance with any aspect of this Technical Bulletin please contact:

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